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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,136	09/16/2003	Frank Liu	18098	3999
26794	7590	05/14/2007	EXAMINER	
TYCO TECHNOLOGY RESOURCES 4550 NEW LINDEN HILL ROAD, SUITE 140 WILMINGTON, DE 19808-2952				CORRIELUS, JEAN B
ART UNIT		PAPER NUMBER		
		2611		
MAIL DATE		DELIVERY MODE		
		05/14/2007 PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/663,136	LIU, FRANK	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jean B. Corrielus	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 31 January 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3,5-8,10-19,21-23,25-32,34 and 35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 13-16,28,29,34 and 35 is/are rejected.
- 7) Claim(s) 1-3,5-8,10-12,17-19,21-23,25-27 and 30-32 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 March 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the step of determining a discrete transfer function, the step of determining a target transfer function, the step of transforming, as recited in claims 1 and claim 17, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Note that the specification must be amended to reflect any drawing changes.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

2. Claims 1-3, 5-8, 10-19, 21-23, 25-32, 34 and 35 are objected to because of the following informalities:

Claim 1, a goal is set forth in the preamble to determining a transfer function for emphasizing a portion of an electromagnetic wave signal prior to being processed. However, the body of the claim does not includes any limitations directed towards using a determined transfer function for emphasizing a portion of an electromagnetic wave signal prior to being processed. The same comment applies to claim 17.

Claim 2, line 2, the limitation “one or more” is incomplete because the claim does not specify one or more “of what” is selected. Line 3, “the” should be deleted in both occurrences.

Claim 5, lines 1-2, the limitation “one or more” is incomplete because the claim does not specify one or more “of what” is selected. Shouldn’t “comprises one or more” be replaced by “ “is”.

Claim 6, line 13, “trans formed by said transforming step” should be inserted before “to”.

As per claim 7, see claim 2.

Claim 10, line 2, the limitation “one or more” is incomplete because the claim does not specify one or more “of what” is selected. Shouldn’t “ involves one or more” be replaced by “ “is”.

Claim 15, line 2, the limitation “one or more” is incomplete because the claim does not specify one or more “of what” is selected.

As per claim 18, see claim 2:

As per claim 22, see claim 2.

Claim 25, line 2, the limitation “one or more” is incomplete because the claim does not specify one or more “of what” is selected. Shouldn’t “one or more” be deleted.

Claim 28, line 2, “a said” should be replaced by “said”; line 4, “further comprises” (second occurrence) is redundant and should be deleted; line 5, the limitation “one or more” is incomplete because the claim does not specify one or more “of what” is selected shouldn’t “comprises one or more” be replaced by “is”.

Claim 30, line before the last, “before using, “transformed by said filter” should be inserted.

As per claim 31, see claim 2.

Claim 34, line 3, “provide” should inserted after “to”; line 3, the limitation “one or more” is incomplete because the claim does not specify one or more “of what” is selected. In addition, the limitations “comprising one or more selected from the group consisting of power transformers, quarter-wave transmission lines, discrete LC components, and a Pi-networks. “ do not flow with the previous limitations recited in the claim.

Note that any claim whose base claim is objected is likewise objected.  
Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13-16, 28, 29, 34 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13, line 2, "said two or more signals" lack of proper antecedent basis.

Claim 14, the limitation "an output signal" is vague and indefinite as there is an unclear antecedent in claim 13, line 3.

As per claim 16, see claim 13.

As per claim 28, the limitation "said output" is vague and indefinite because it is unclear as to what output such limitation refer to. Should such limitation be replaced by "provide said output signal" or ""said output circuit"

As per claim 29, line 2, "said two or more signals" lack of proper antecedent basis; line 3, the limitation "an output signal" is vague and indefinite as there is an unclear antecedent in claim 21, last line.

Claim 34, line 1., "said output circuit" lacks of proper antecedent basis.

As per claim 35, see claim 29.

Note that any claim whose base claim is rejected is likewise rejected.

### ***Response to Arguments***

5. Applicant's arguments, see page 15 second full paragraph, filed 1/31/07, with respect to art rejection of claims 1 and the other claims reciting similar limitation have been fully considered and are persuasive. The art rejection has been withdrawn.

***Allowable Subject Matter***

6. Claims 1-3, 5-8, 10-12, 17-19, 21-23, 25-27, 30-32, would be allowable if amended to overcome the objection set forth above.
7. Claims 13-16, 28, 29, 34 and 35 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Jean B Corrielus*  
Jean B Corrielus  
Primary Examiner  
Art Unit 2611

5-10-07